

REMARKS

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page(s) is captioned "Version With Markings To Show Changes Made."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Page 1, before the first line, insert as a separate paragraph:

This application is the US national phase of international application

PCT/GB00/03092 filed 11 August 2000, which designated the US.

IN THE CLAIMS

3. A method according to claim 1-~~or~~2, including grouping the transition data by the type of element transition.

6. A method according to claim 4-~~or~~5, wherein a signal defining a transition is received by one or more receiver coils, including determining the type of transition in accordance with the polarity of the rate of change of the field vector in the direction of the element.

7. A method according to claim 4, ~~5~~ or 6, including determining information relating to the switching fields for each of the first and second types of transition.

10. A method according to claim 8-~~or~~9, further comprising calculating the bias field on the element as substantially the sum of first and second switching fields.

11. A method according to claim 9-~~or~~10, wherein the first switching field comprises the mean value of the switching fields for the first type of transition and the second switching field comprises the mean value of the switching fields for the second type of transition.

12. A method according to ~~any one of the preceding claims~~1, including associating the transition data with one or more respective elements using a receiver vector whose components represent the amplitudes of the signals in one or more receive coils.

13. A method according to ~~any one of the preceding claims~~1, comprising scanning the tag using a rotating magnetic field.

15. A method according to ~~any one of the preceding claims~~1, comprising determining the coercivity, the local magnetic field bias resolved in the direction of the or each magnetic element and the orientation of the or each magnetic element relative to a known interrogation field reference frame.

16. A method according to ~~any one of the preceding claims~~1, further comprising determining the amplitude response of the or each magnetic element to the applied magnetic field.

19. A method according to claim 17-~~or~~¹⁸ wherein the respective characteristics comprise the coercivities of the elements.

20. A method according to ~~any one of~~ claims 17-~~to~~¹⁹, comprising storing data by reference to the respective characteristics of the elements.

22. A method according to claim 20-~~or~~²¹, wherein data is storables by reference to parameters relating to any one or more of rate of change of applied field, perpendicular field, response time, characteristic response shape and the statistical distribution of the parameters.

24. A computer program, which when run on a computer, is configured to carry out the steps of ~~any one of~~ claims 1-~~to~~²³.

27. A tag reader according to claim 25-~~or~~²⁶, further comprising means for selecting the element direction which minimises the scatter of transition point field vectors resolved along the direction of the element.

28. A tag reader according to ~~any one of~~ claims 25-~~to~~²⁷, wherein the transition data includes data defining first and second switching fields at which at an element undergoes first and second transitions.